



## ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

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ROD R. BLAGOJEVICH, GOVERNOR

DOUGLAS P. SCOTT, DIRECTOR

217/524-3300

April 23, 2007

Certified Mail

7004 2510 0001 8616 6171

Dover Industrial Chrome Inc.  
Attn: Environmental Coordinator  
2929 North Campbell  
Chicago, Illinois 60618

Re: 0316060002 -- Cook County  
Dover Industrial Chrome  
ILD005125588  
RCRA Permit

Dear Environmental Coordinator:

The Illinois EPA and the United States Environmental Protection Agency (U.S. EPA) have compiled a list of all facilities deemed appropriate and important to address using the Resource Conservation and Recovery Act's (RCRA) Corrective Action Program. Because this set of 3,880 facilities has national remediation goals which will culminate in the year 2020, it is referred to as the 2020 Corrective Action Universe. Your facility is part of this 2020 Universe.

As a result, a final remedy needs to be in place (i.e., remedy construction completed) at your facility by 2020 (although actual attainment of cleanup goals through remedy implementation may take a while longer). If we have not already done so, we will be working with you to develop a plan and a schedule that achieves this goal before 2020.

Your facility has been included in the 2020 Universe because one or more of the following is true:

- It has a RCRA permit obligation,
- Illinois EPA and U.S. EPA agreed that it needs to be addressed under the RCRA Corrective Action Program, as it at one time operated a hazardous waste management unit subject to the interim status or permit requirements of RCRA.


Inclusion on this list does not imply failure on your part to meet any legal obligation, nor should it be construed as an adverse action against you. It only means that Illinois EPA and U.S. EPA have identified your facility – and every other facility in the 2020 Universe – as needing to complete RCRA Corrective Action if they have not done so already. Our national program goal is to address these cleanup obligations before the end of 2020. Accordingly, progress will be tracked for each facility in the 2020 Universe. The list of facilities will be posted on our web site at <http://www.epa.gov/correctiveaction> in the near future.

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Illinois EPA will work to address remediation concerns at your facility in a manner consistent with your plans for the property. There are a variety of options available for completing the required remediation efforts at your facility, ranging from participation in Illinois EPA's Site Remediation Program to establishment of an Administrative Order on Consent with USEPA under Section 3008(h) of RCRA.

Illinois EPA would like to schedule a meeting with you in the near future to discuss remedial activities at your facility and achievement of the goal mentioned in the second paragraph of this letter. Please contact James K. Moore, P.E. of my staff at 217/524-3295 if you have any questions regarding this letter and to schedule a meeting to discuss the contents of this letter.

Sincerely,

A handwritten signature in black ink, appearing to read "Stephen F. Nightingale", with a stylized flourish at the end.

Stephen F. Nightingale, P.E.  
Manager, Permit Section  
Bureau of Land

SFN:JKM:bjh\072572s.dot

cc: Hak Cho, USEPA, Region 5



11/30

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 5  
77 WEST JACKSON BOULEVARD  
CHICAGO, IL 60604-3590

REPLY TO THE ATTENTION OF:

HRE-8J

November 24, 1992

Dr. Ariel Schrodt  
Dover Industrial Chrome, Inc.  
2929 North Cambell Avenue  
Chicago, IL 60618

Re: Visual Site Inspection  
Dover Industrial Chrome, Inc.  
Chicago, Illinois  
ILD 005 125 588

Dear Mr. Schrodt:

As indicated in the letter of introduction sent to you on December 12, 1991, the U.S. Environmental Protection Agency is enclosing a copy of the final Preliminary Assessment/Visual Site Inspection (PA/VSI) report for the referenced facility. The executive summary and conclusions and recommendations sections have been withheld as Enforcement Confidential.

If you have any questions, please call Francene Harris at (312) 886-2884.

Sincerely yours,

A handwritten signature in dark ink, appearing to read "Kevin M. Pierard".

Kevin M. Pierard, Chief  
Minnesota/Ohio Technical Enforcement Section  
RCRA Enforcement Branch

PRC Environmental Management, Inc.  
233 North Michigan Avenue  
Suite 1621  
Chicago, IL 60601  
312-856-8700  
Fax 312-938-0118



**PRELIMINARY ASSESSMENT/  
VISUAL SITE INSPECTION**

**DOVER INDUSTRIAL CHROME INC.  
CHICAGO, ILLINOIS  
ILD 005 125 588  
FINAL REPORT**

**Prepared for**

**U.S. ENVIRONMENTAL PROTECTION AGENCY  
Office of Waste Programs Enforcement  
Washington, DC 20460**

Work Assignment No.	:	C05087
EPA Region	:	5
Site No.	:	ILD 005 125 588
Date Prepared	:	September 8, 1992
Contract No.	:	68-W9-0006
PRC No.	:	009-C05087IL2R
Prepared by	:	B&V Waste Science and Technology Corp. (Mitchell P. Balek and Timothy J. Moody)
Contractor Project Manager	:	Shin Ahn
Telephone No.	:	(312) 856-8700
EPA Work Assignment Manager	:	Kevin Pierard
Telephone No.	:	(312) 886-4448

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### Attachments

- A EPA PRELIMINARY ASSESSMENT FORM 2070-12
- B VISUAL SITE INSPECTION SUMMARY AND PHOTOGRAPHS
- C VISUAL SITE INSPECTION FIELD NOTES

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## EXECUTIVE SUMMARY

ENFORCEMENT  
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B&V Waste Science and Technology Corp. (BVWST) performed a preliminary assessment and visual site inspection (PA/VSI) to identify and assess the existence and likelihood of releases from solid waste management units (SWMU) and other areas of concern (AOC) at the Dover Industrial Chrome facility in Chicago, Illinois. This report summarizes the results of the PA/VSI and evaluates the potential for releases of hazardous wastes or hazardous constituents from SWMUs and AOCs identified. In addition, a completed U.S. Environmental Protection Agency (EPA) Preliminary Assessment Form (EPA Form 2070-12) is included in Attachment A to assist in prioritization of RCRA facilities for corrective action.

Dover Industrial Chrome is a hard chrome-electroplating facility specializing in plating rollers and cylinders for paper companies and steel mills. The facility generates and manages the following waste streams: hydrochloric acid/trivalent chromium (D002/D007), hexavalent chromium/chrome plating solution (D007), iron hydroxide/nickel tank sludge (D002), lead oxide/chromate (D007/D008), chrome hydroxide (F006/D007), chromium/condensed hexavalent mixed with soil and debris from the cleaning of the ventilation system, and rust/chrome acid blower waste (D007), retention basin sludge (D007), and trivalent chromium flakes (D007). The facility has operated at its current location since 1945. The facility occupies 1.035 acres in a mixed use area and employs 14 people. The facility's regulatory status is as a generator of hazardous waste and a storage and treatment facility. Dr. Areil Schrodt bought the company in 1976, although it was established at its current location in 1945. Since its establishment, according to Dr. Schrodt, it has done chrome plating. When he bought the business in 1976, it occupied the back of the building. The front of the building was occupied by a rubber products company, then later by Abbott Adhesives. In 1978, Dr. Schrodt bought the remainder (front part) of the building and adjacent lot on the north side of the building.

Dr. Schrodt first leased the front of the building to Sherwood Enterprises, a box company, and a florist. The florist moved out. Gifford Investment, a real estate management firm, currently leases a few rooms in the building. In 1978, Dr. Schrodt established a lab in the southwestern part of the building.

At the end of 1990, a release of chromic acid from a 55-gallon drum on the drum storage pad occurred. Industrial Environmental Lab took soil samples, but according to Dr. Schrodt, the results have not been received.

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INITIALS uw

On May 31, 1990, chromic acid was released when one of the plating baths overflowed into the retention basin located under the plating tank; it was pumped into the combined sewer via a sump pump in the retention basin. The sewer collects both sanitary and storm water which goes to the Skokie Processing Plant. Approximately 1,800 pounds of chromic acid were pumped into the storm sewer. According to Dr. Schrodtt, the sanitary district conducted tests after the spill on the effluent from the retention basin to the sewer and claimed that the facility was not in violation of State or Federal regulations.

Dover Industrial Chrome has had past RCRA compliance problems and has been inspected four times since February 1981. Each inspection has resulted in notation of continuing violations of some regulatory requirements.

The PA/VSI identified the following five SWMUs and one AOC at the facility:

Solid Waste Management Units

1. Drum Storage Pad
2. Hazardous Waste Container Storage Shed
3. Plating Area
4. Wastewater Treatment System
5. Laboratory

Areas of Concern

1. Fiber Drums of Old Acid Bricks

The potential is moderate for release of hazardous constituents to ground water from this facility. SWMU 1, the drum storage pad, has had one documented spill, according to Dr. Schrodtt. The concrete is cracked and stained; therefore, there is a possibility of ground-water contamination.

The potential is moderate for release of hazardous constituents to surface water from this facility. SWMU 1, the drum storage pad, has had one documented release and slopes toward a storm sewer. Precipitation runoff could rinse a spill into the storm drain. SWMU 3, the plating area, has two sump pumps in the retention basins, and overflow goes to the combined storm sewer.

The potential is moderate for a release of hazardous constituents to the onsite soil from SWMU 1 and AOC 1. Due to the spill earlier this year, soil on the eastern portion of SWMU 1 may be contaminated from the contents of the spill. The pile of old equipment surrounding AOC 1 may puncture or knock down the drums.

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BVWST recommends that the facility take soil samples underneath and around the concrete pad of SWMU 1 because of the past spill and the staining and cracks in the concrete. BVWST strongly recommends that the facility inquire about the test results taken of the onsite soil near SWMU 1. Soil samples were taken over a year ago. BVWST recommends that the facility isolate the drums from the old equipment pile surrounding this area in AOC 1.

RELEASED

DATE

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## 1.0 INTRODUCTION

PRC Environmental Management, Inc. (PRC), received Work Assignment No. C05087 from the U.S. Environmental Protection Agency (EPA) under Contract No. 68-W9-0006 (TES 9) to conduct preliminary assessments (PA) and visual site inspections (VSI) of hazardous waste treatment and storage facilities in Region 5. As a team member with PRC under the TES 9 contract, B&V Waste Science and Technology Corp. (BVWST) conducted the PA/VSI for the Dover Industrial Chrome facility.

As part of the EPA Region 5 Environmental Priorities Initiative, the RCRA and CERCLA programs are working together to identify and address RCRA facilities that have a high priority for corrective action using applicable RCRA and CERCLA authorities. The PA/VSI is the first step in the process of prioritizing facilities for corrective action. Through the PA/VSI process, enough information is obtained to characterize a facility's actual or potential releases to the environment from solid waste management units (SWMU) and areas of concern (AOC).

A SWMU is defined as any discernible unit at a RCRA facility in which solid wastes have been placed and from which hazardous constituents might migrate, regardless of whether the unit was intended to manage solid or hazardous waste.

The SWMU definition includes the following:

- RCRA-regulated units, such as container storage areas, tanks, surface impoundments, waste piles, land treatment units, landfills, incinerators, and underground injection wells.
- Closed and abandoned units.
- Recycling units, wastewater treatment units, and other units that EPA has generally exempted from standards applicable to hazardous waste management units.
- Areas contaminated by routine and systematic releases of wastes or hazardous constituents. Such areas might include a wood preservative drippage area, a loading-unloading area, or an area where solvent used to wash large parts has continually dripped onto soils.

An AOC is defined as any area where a release to the environment of hazardous waste or constituents has occurred or is suspected to have occurred on a nonroutine and nonsystematic basis. This includes any area where such a release in the future is judged to be a strong possibility.

The purpose of the PA is as follows:

- Identify SWMUs and AOCs at the facility.
- Obtain information on the operational history of the facility.
- Obtain information on releases from any units at the facility.
- Identify data gaps and other informational needs to be filled during the VSI.

The PA generally includes review of all relevant documents and files located at state offices and at the EPA Region 5 office in Chicago.

The purpose of the VSI is as follows:

- Identify SWMUs and AOCs not discovered during the PA.
- Identify releases not discovered during the PA.
- Provide a specific description of the environmental setting.
- Provide information on release pathways and the potential for releases to each medium.
- Confirm information obtained during the PA regarding operations, SWMUs, AOCs, and releases.

The VSI includes interviewing appropriate facility staff, inspecting the entire facility to identify all SWMUs and AOCs, photographing all SWMUs, identifying evidence of releases, initially identifying potential sampling locations, and obtaining all information necessary to complete the PA/VSI report.

This report documents the results of a PA/VSI of the Dover Industrial Chrome facility in Chicago, Illinois. The PA was completed on December 19, 1991. BVWST gathered and reviewed information from the Illinois Environmental Protection Agency (IEPA) and from EPA Region 5 RCRA files. The VSI was conducted on December 20, 1991. It included interviews with facility representatives and a walk-through inspection of the facility. Five SWMUs and one AOC were identified at the facility.

BVWST completed EPA Form 2070-12 using information gathered during the PA/VSI. This form is included in Attachment A. The VSI is summarized and seven inspection photographs are included in Attachment B. Field notes from the VSI are included in Attachment C.

## **2.0 FACILITY DESCRIPTION**

This section describes the facility's location, past and present operations (including waste management practices), waste generating processes, history of documented releases, regulatory history, environmental setting, and receptors.

### **2.1 FACILITY LOCATION**

The Dover Industrial Chrome facility is located at 2929 North Campbell Avenue in Chicago, Cook County, Illinois (latitude 41° 56' 5.3" N and longitude 87° 41' 23.4" W), as shown in Figure 1. The facility occupies 1.035 acres in a mixed use area.

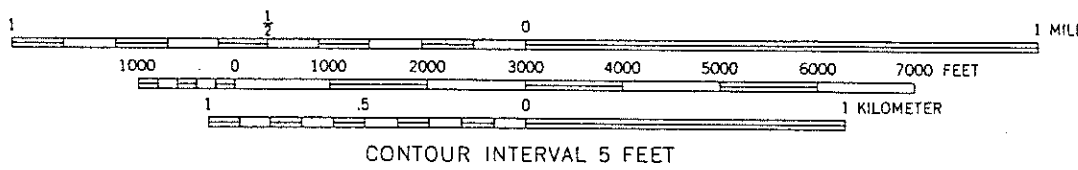
The Dover Industrial Chrome facility is bordered on the north by Advance Transformer Company; on the west, across Campbell Avenue, by Palmer Metal Products; on the south by Midwest Enameling; and on the east by an automobile body and fender repair shop.

### **2.2 FACILITY OPERATIONS**

The Dover Industrial Chrome facility is a hard chrome-electroplating business. Its major operations include hard chrome electroplating of steel plates, and industrial nickel plating, chromium grinding, and polishing. The facility specializes in plating rollers and cylinders for paper companies and steel mills.

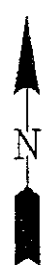
Dr. Areil Schrodt owns the facility, which employs approximately 14 people. The company was established at its current location in 1945 and, according to Dr. Schrodt, the company did chrome plating then. Dr. Schrodt bought the chrome plating business, which occupied the back of the building in 1976. The front of the building was occupied at the time by a rubber products company, and later by Abbott Adhesives. In 1978, Dr. Schrodt bought the remainder (front part) of the building and a lot along the northern side of the building.

Dr. Schrodt first leased the front portion of the building to a box company (Sherwood Enterprises) and a florist. The florist has moved out and most of the space is used by Dr. Schrodt for storage of miscellaneous materials. Gifford Investment, a real estate management firm, leases a few rooms in the building for offices.



QUADRANGLE LOCATION

Chicago Loop, Illinois  
N41523-V8737.5/7.5



Dover Industrial Chrome  
Chicago, Illinois  
PA/VSI

FIGURE 1  
FACILITY LOCATION



During the latter part of 1978, Dover Industrial Chrome established a lab (SWMU 5) in the southwestern part of the building. A ceramic porous pot removes trivalent chromium, copper and iron ions from the chromium baths. The ion exchange purification system produces a solid flaky metal waste. About two tablespoons per bath of this waste are generated and stored in the lab in jars and plastic bags (IEPA, 1990b).

Facility SWMUs are identified in Table 1. The facility layout, including SWMUs and the AOC is included as Figure 2.

### **2.3 WASTE GENERATING PROCESSES**

The primary hazardous waste streams generated at the Dover Industrial Chrome facility are hydrochloric acid/trivalent chromium (D002/D007), hexavalent chromium/chrome plating solution (D007), iron hydroxide/nickel tank sludge (D002), lead oxide/chromate (D007/D008), chrome hydroxide (F006/D007), chromium/condensed hexavalent mixed with soil and debris from the cleaning of the ventilation system and rust/chrome acid blower waste (D007), retention basin sludge (D007), and trivalent chromium flakes (D007). These wastes are generated during hard chrome electroplating operations, which include hard chrome electroplating of steel plates, industrial nickel plating, and chromium grinding and polishing. Wastes generated at the facility are discussed below and are summarized in Table 2.

Hydrochloric acid/trivalent chromium was generated from stripping operations. When acid became contaminated with chrome from process tanks in the plating area, it could no longer be used and is stored in a majority of the drums on SWMU 1. This waste has never been transported offsite while Dr. Schrodt has owned the facility. About 100 gallons were generated yearly and approximately 1210 gallons are contained in 23 drums on the drum storage pad. According to Dr. Schrodt, Recontek, located in southern Illinois, will accept and recover the waste. It will be transported by BeChem. Dr. Schrodt said IEPA recently authorized this action and he plans to schedule a removal date.

Hexavalent chromium/chrome plating solution is generated from tank cleaning when plating solutions contaminated with trivalent chromium, iron, and copper are removed. Approximately 467 gallons of this waste are stored in SWMU 1.

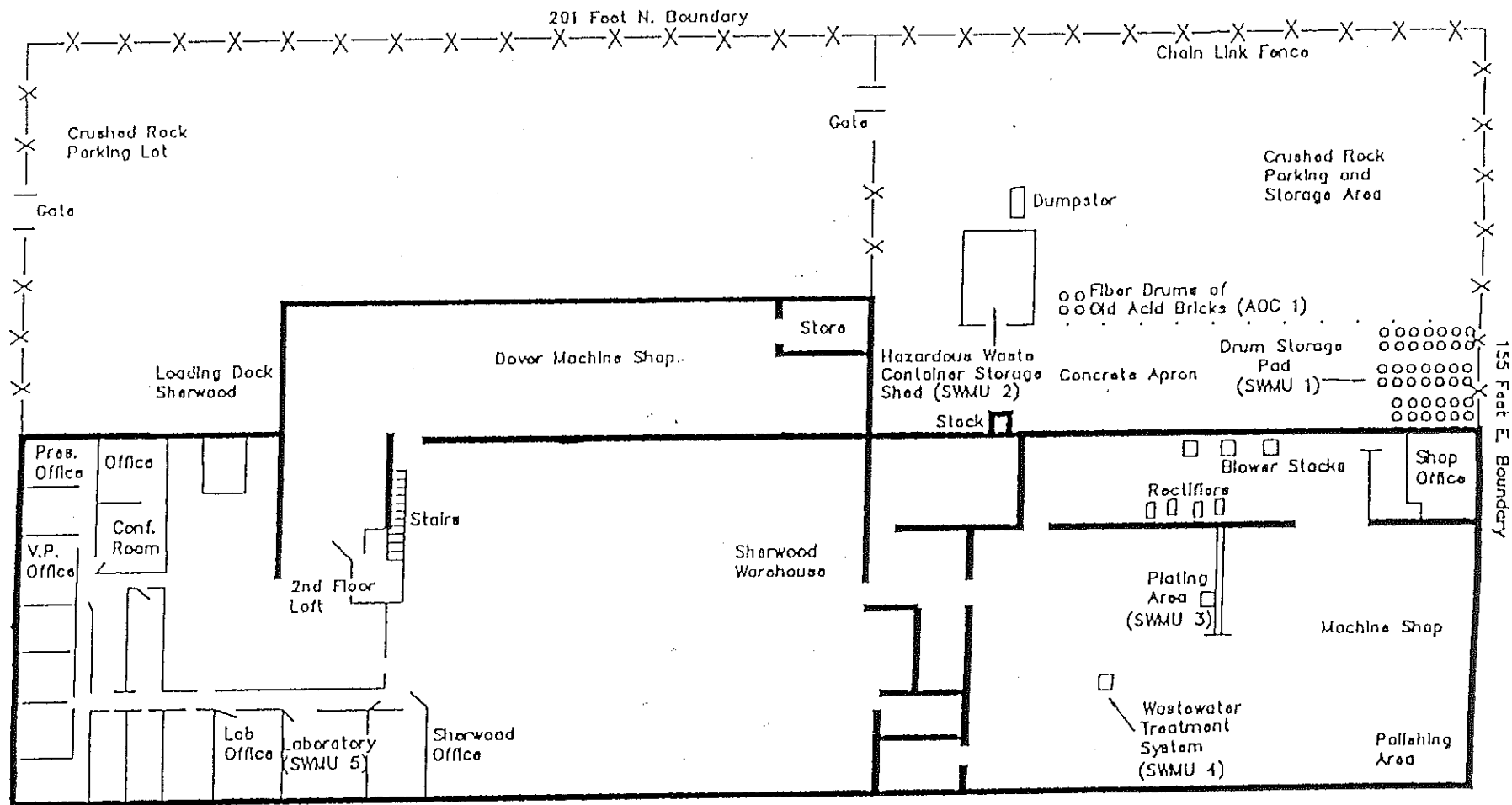
Iron hydroxide/nickel tank sludge is generated from nickel tank cleaning. This waste is stored in two 55-gallon drums in the back of SWMU 2 on the right side. According to Dr. Schrodt, this waste is 63% boric acid and will be recycled.

TABLE 1

SWMU Number	SWMU Name	RCRA Hazardous Waste Management Unit*	Status
1	Drum Storage Pad	Yes	Active
2	Hazardous Waste Container Storage Shed	Yes	Active
3	Plating Area	No	Active
4	Wastewater Treatment System	No	Inactive
5	Laboratory	No	Active

**Note:**

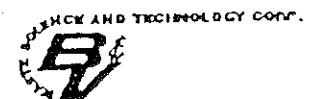
\* A RCRA hazardous waste management unit is one that currently requires or formally required submittal of a RCRA Part A or Part B permit application.



Dover Industrial Chrome  
Chicago, Illinois

PAGE

Figure 2  
Facility Layout



**TABLE 2**  
**SOLID WASTES**

<u>Waste/EPA Waste Code</u>	<u>Source</u>	<u>Primary Management Unit*</u>
Hydrochloric Acid/Trivalent Chromium/D002/D007	Stripping Operations	1, 3
Hexavalent Chromium/Chrome Plating Solution/D007	Plating Tank Cleaning	1, 3
Iron Hydroxide/Nickel Tank Sludge/D002	Nickel Tank Cleaning	2, 3
Lead Oxide/Chromate/D007/D008	Plating Tank Cleaning	2, 3
Chrome Hydroxide/F006/D007	Wastewater Treatment System	2, 4
Chromium/Condensed Hexavalent Mixed with Soil and Debris from the Cleaning of the Ventilation System and Rust/Chrome Acid Blower Waste/D007	Ventilation System Cleaning	2
Retention Basin Sludge/D007	Pit Beneath Process Area	2, 3
Trivalent Chromium Flakes/D007	Ion Exchange Purification System	3, 5

Note:

- \* Primary management unit refers to a SWMU that currently manages or formerly managed the waste.



Lead oxide/chromate is generated from plating tank sludge when they clean their plating tanks. Approximately 75 pounds of this waste is stored in SWMU 2. According to Dr. Schrodtt, on December 10, 1990, 10,180 pounds (accumulated over 14 years) was shipped by Metropolitan Environmental Inc. to Inmettco in Elwood City, Pennsylvania.

Chrome hydroxide was generated from the former wastewater treatment system and is no longer generated. This waste is stored in SWMU 2 in a box on the east side. Approximately 200 gallons were onsite. According to Dr. Schrodtt, this waste will either be reused or shipped off, but he will first deal with the major wastes such as the hydrochloric acid.

Chromium/condensed hexavalent mixed with soil and debris from the ventilation system and rust/chrome acid blower waste is generated from cleaning the ventilation system, and retention basin sludge is generated from the pit beneath the process area. These wastes are stored in four cardboard boxes in the middle of the shed in SWMU 2. According to Dr. Schrodtt, Metropolitan Environmental will transport it to Encycle in Texas for recovering the chrome. They are waiting for authorization from the State of Texas.

Trivalent chromium, copper and iron solid flakes are generated from removing impurities from the chromium tanks. About 2 tablespoons of waste per bath is generated and stored in SWMU 5.

## **2.4 HISTORY OF DOCUMENTED RELEASES**

This section discusses the history of documented releases to groundwater, surface water, air and on-site soils at the Dover Industrial Chrome facility.

Dr. Areil Schrodtt, owner of Dover Industrial Chrome, stated that at the end of 1990, a release from the drum storage pad (SWMU 1) occurred. Dr. Schrodtt stated that the lid from a 55-gallon drum was loose, allowing less than a gallon of chromic acid solution to spill out. The leak spilled at the eastern section of the drum storage pad, against the fence along the eastern side of the facility. Dr. Schrodtt stated that the liquid caused a portion of the fence to rust. He stated that the underlying soil was removed and placed into a 30-gallon drum and that samples of the soil were taken by Industrial Environmental Lab before and after the soil was removed. Dr. Schrodtt stated that the analytical results have not been received from the laboratory. Photograph No. 1 shows the rusted portion of the fence--the rectangular area behind the middle row of drums outlined by a thick wire on the fence. No documentation on the spill existed for BVWST personnel to review.

On May 31, 1990, a release of chromic acid occurred when one of the plating baths overflowed and the overflow was pumped into the storm sewer drain. Dr. Schrodtsaid water was being added to a plating tank which overflowed into the catch basin. The sump pump was left on overnight and continued to pump the water and chromic acid mixture into the combined sewer drain throughout the evening. Approximately 1,800 pounds of chromic acid, which is about 900 pounds of chromium, was pumped into the combined sewer. This accident was reported to the Metropolitan Sanitary District of the City of Chicago. According to Dr. Schrodtsaid, the sanitary district conducted tests on the effluent from the retention basin under the plating bath to the sewer and claimed that the facility did not violate any State or Federal regulations. The reported accident was a one-time accident by Dover Industrial Chrome.

## **2.5 REGULATORY HISTORY**

Dover Industrial Chrome submitted a Notification of Hazardous Waste Activity to EPA on September 27, 1980 (Dover Industrial Chrome, 1980a). The facility submitted a RCRA Part A application on November 18, 1980 (Dover Industrial Chrome, 1980b). This application listed the following process codes and capacities. A 5,500-gallon S01 (container storage area), an 8,000-gallon S02 (storage tank), a 400-gallon T01 (tank treatment unit), and an estimated 500-gallon T04 (physical treatment unit). The S01 consists of a storage shed, the S02 is a storage tank near the T01 which is a wastewater treatment system for the evaporation of liquids, and the T04, which has not been obtained, was to be an ion exchange purifier. Dr. Schrodtsaid the T04 was not installed due to the estimated high cost of its operation. The application listed the following wastes: 600 gallons of F006, 5,000 gallons of F007, 165 gallons of F008, and 3,000 gallons of F009 (Dover Industrial Chrome, 1980b).

USEPA has indicated that the facility does not have interim status because the Notification of Hazardous Waste Activity was not submitted by the August 18, 1980 deadline (IEPA, 1990b).

An amended RCRA Part A with the corrected hazardous waste numbers was submitted September 22, 1987 (IEPA, 1990b). The revised version excluded the 8,000-gallon tank. Dr. Schrodtsaid that the S02 was actually part of the wastewater treatment system, T01. Since T01 activity had not been done since 1978, the treatment system was also excluded from the revision. Dr. Schrodtsaid that rinsing is now done over the plating tanks or a separate unit (like a container). Rinse water runs off or is poured back into the plating tank as make up water. The amended Part A consists of 14,000-gallons S01 (storage), 400-gallons T01 (tank treatment unit), and 400-gallons T04 (physical treatment). An outside liquid waste storage area was added as part of the S01. Dr. Schrodtsaid changed the original Part A's T04 unit, the ion exchange purifier, to be operated as the revised Part A's T01 unit. The revised T04 activities were to be

two processes involving air drying of wastewater treatment sludges in open containers from inside the S01 unit [T04(a)], and the distillation of hydrochloric acid from chromium stripping operations near the blowers and rectifiers in the process area [T04(b)]. This application listed the following estimated annual quantity of wastes: 300– gallons of F006, 1,000–gallons of D002, 100 gallons of D008 and D007 (tank sludge), 100 gallons of D007 (blower waste), and 1,000–gallons of D007 (spent plating solution) (IEPA, 1990b).

Emission control waste (D007) is generated when blower dust is cleaned out of filters. The IEPA Air Permit Identification Number is 031600CUA and was issued on August 28, 1989, and expired on November 30, 1990. An updated operating permit was not found in the preliminary assessment files. The air permit issued on August 28, 1989, designated the facility to operate emission source(s) and/or air pollution control equipment consisting of a process steam boiler using natural gas or oil #5 as backup, eight chrome plating tanks with one recovery tunnel, one nickel plating tank, and one polishing system (IEPA, 1989b). Dover Industrial Chrome is required to have operating air permits for the above units. The facility has no history of odor complaints from area residents and has no history of air permit compliance problems. The facility does not have and is not required to have a National Pollutant Discharge Elimination System (NPDES) permit.

In the past, Dover Industrial Chrome has had RCRA compliance problems. It has been inspected four times since February 1981. The facility has had numerous continuing violations of some requirements in each subsequent inspection. For example, 265.13(a) and (b) were identified as violations in each of the four inspections. These violations continued even after a Complaint and Compliance Order was issued in July 1987 (IEPA, 1990b). A detailed compliance history was recorded on March 30, 1989. The memorandum recommends the facility be considered as a High Priority Violator to USEPA (IEPA, 1990b).

## **2.6 ENVIRONMENTAL SETTING**

This section describes the climate, flood plain and surface water, geology and soils, and ground water in the vicinity of the Dover Industrial Chrome facility.

### **2.6.1 Climate**

Data from the National Weather Bureau at O'Hare Airport indicate an average daily maximum temperature of 58.7°F and an average daily minimum of 39.7°F. The average annual precipitation from 1958 to 1990 was 33.3 inches, and the greatest 24–hour rainfall was 9.3 inches in August 1987. The overall wind direction varies seasonally with an average wind speed of 10.3 mph (National Weather Bureau, 1990).

### **2.6.2 Flood Plain and Surface Water**

The North Branch of the Chicago River flows southeasterly, approximately 600 feet northeast of the site. According to the Flood Insurance Rate Map series, produced by the Federal Emergency Management Agency, the site does not lie in the 100-year flood plain (FEMA, 1991). The surface water runoff flows to storm sewer drains located onsite. This water discharges to the publicly owned treatment works (POTW).

### **2.6.3 Geology and Soils**

Much of Cook County has not been mapped in detail by the U.S. Department of Agriculture (1979) because of urban land use. However, the report supplies a regional soil map that classifies the near-surface soil near Dover Industrial Chrome as nearly level, poorly drained soil resulting from the deposition of clay and silt in a glacial lake (USDA, 1979).

Geology at the site is expected to be comprised of an unknown thickness of glacial deposits (lacustrine, clay, till, and outwash) over Paleozoic sedimentary rock units. No site-specific information on the stratigraphy is presently available. However, a detailed statewide study by Berg and Kempton (1988) provides regional three-dimensional mapping of geological materials to a depth of 50 feet. Their map suggests over 20 feet of predominantly silty, clayey till over Silurian and Devonian rock, mainly dolomite. The bedrock surface is expected to be between 20 and 50 feet below grade (Berg and Kempton, 1988).

### **2.6.4 Groundwater**

No site-specific hydrogeology information is currently available. Therefore, no statements may be made regarding the depth to the water table, ground-water flow rates or flow directions, the stratigraphic position of aquifers beneath the site, or the possible interaction of groundwater and surface water at the adjacent river.

In the northeastern Illinois region, groundwater is obtained from four major aquifer systems -- the glacial drift system, the shallow bedrock system, and two deep bedrock systems. They are distinguished by their hydrologic properties and recharge source areas (Hughes et al., 1966). In central Cook County, the glacial drift is thin, and sand and gravel deposits are correspondingly thin or absent. Virtually all wells penetrate deep bedrock aquifers (Bergstrom et al., 1955).

The shallow bedrock aquifer system in northeastern Illinois underlies the glacial drift system and is mainly comprised of Silurian dolomite formations. The upper boundary of this system is the bedrock-drift contact, and the lower boundary is the upper Ordovician Maquoketa Shale. Water from this aquifer is obtained from fractures and solution openings in the Silurian dolomite beds (Hughes, et al., 1966). The shallow bedrock aquifer system receives some recharge locally from precipitation (Hughes et al., 1966).

The deep bedrock aquifer systems include the Cambrian-Ordovician aquifer system and the Mt. Simon aquifer system. The Cambrian-Ordovician aquifer system contains two major aquifers -- the Glenwood-St. Peter aquifer and the Ironton-Galesville aquifer. The top of the Cambrian-Ordovician aquifer system is the Galena-Platteville Dolomite. The Glenwood-St. Peter aquifer is widely utilized where water requirements are less than 200 gallons per minute (gpm). This unit has a hydraulic conductivity between nine and 15 gallons per day per square foot (gpd/sq. ft.). The Ironton-Galesville Sandstone aquifer has a hydraulic conductivity between 30 and 40 gpd/sq. ft.. Recharge to the deep bedrock aquifer systems is mostly from west and north of the six-county metropolitan area, where rocks crop out at the surface or lie immediately below the glacial drift. Minor recharge occurs as leakage through the shallow bedrock aquifer system (Hughes et al., 1966).

The Mt. Simon aquifer system is bounded above by the relatively impermeable shales and siltstones of the upper and middle Eau Claire Formation, and below by pre-Cambrian basement rock. The average hydraulic conductivity of the aquifer system is 16 gpd/sq. ft. (Hughes et al., 1966) and recharge is largely from the outcrop region of Cambrian rocks in central-southern Wisconsin (Willman, 1971).

## **2.7 RECEPTORS**

The Dover Industrial Chrome facility occupies 1.035 acres in a mixed use area in Chicago, Illinois. Chicago has a population of about 3 million people.

The Dover Industrial Chrome facility is bordered on the north by Advance Transformer, on the west by Palmer Metal Products, on the south by Midwest Enameling, and on the east by an automobile body and fender repair shop. The nearest school, Lane Tech, is located about one half mile north of the facility. Facility access is controlled by a six-foot high chain and barbed wire fence. A security guard is present 24 hours per day. The facility is also equipped with 24-hour camera surveillance.

The nearest surface body water, North Branch of the Chicago River, is located about 600 feet northeast of the facility and is used for boating. No municipal water-supply intakes are known on the North Branch of the Chicago River within at least five miles downstream.

Groundwater is not used at this facility as a water supply. The nearest drinking water well is located 3.5 miles southwest of the facility. This well is located upgradient of the facility. The nearest industrial water well is located three miles southwest of the facility. This well is located downgradient of the facility (IEPA, 1990b).

### 3.0 SOLID WASTE MANAGEMENT UNITS

This section describes the five SWMUs identified during the PA/VSI. The following information is presented for each SWMU: description of the unit, dates of operation, wastes managed, release controls, history of documented releases, and BVWST observations. Figure 2 shows the SWMU locations.

#### SWMU 1

#### DRUM STORAGE PAD

##### Unit Description:

The drum storage pad is located outdoors, near the fence placed along the eastern side of the property and just north of the old building. The unit stores plastic, 55-gallon drums that are aligned in three rows, two drums wide each. The rate of accumulation varies dependent on the amount of stripping required per customer. The unit measures 30 x 30 feet and slopes toward a storm sewer drain west of the drums. The pad is made of concrete and is not diked to confine any liquids from a possible spill (see Photograph No. 1). Waste is stored for greater than 90 days at this unit.

##### Date of Startup:

This unit began operation in 1978. The concrete pad was installed before the business was purchased in 1978.

##### Date of Closure:

This unit is active.

##### Wastes Managed:

This unit manages hydrochloric acid/trivalent chromium (D002/D007) from stripping operations, contained in 23 drums in the central row of the pad. Used hexavalent chromium/chrome plating solution (D007) from replacing chrome is also stored. The majority of drums containing hydrochloric strip acid will be transported to Recontek in southern Illinois. According to Dr. Schrodte, Recontek has agreed to accept and recover the waste, rather than just store it. The BeChem company will transport the waste to Recontek. Dr. Schrodte was waiting for IEPA to authorize this action and said they received authorization about two weeks ago. He is waiting to plan a schedule with Recontek. The remaining wastes will either be reused or shipped off, but Dr. Schrodte is first working on the major ones, such as the hydrochloric acid.

**Release Controls:** This pad is made of concrete and has no secondary containment. The pad slopes towards a storm sewer drain west of the drums. The unit has no release controls.

**History of Documented Releases:** Dr. Schrodts stated that a release from this unit occurred at the end of 1990. He stated that a 55-gallon drum did not have its lid tightened down. The drum tilted and a small quantity of chromic and plating solution spilled onto the adjacent ground and fence. Samples were taken by Industrial Environmental Compliance Lab from the soil where the spill occurred (at a one to two-square-foot area). Dr. Schrodts stated that analytical results of the soil samples have not been received. There was no documented material about this spill to review.

**Observations:** The unit contained evidence of releases due to discoloration of the concrete. The concrete is also cracked. This unit has no secondary containment. There were three rows of drums on skids totalling thirty-five 55-gallon drums and three 30-gallon drums.

## **SWMU 2**

## **HAZARDOUS WASTE CONTAINER STORAGE SHED**

**Unit Description:** The hazardous waste container storage shed is located west of the drum storage pad and north of the building. The unit measures 18 x 24 feet. It is a metal shed with a concrete floor (see Photograph Nos. 2 and 3). Drums, cardboard boxes, miscellaneous materials, and equipment, are stored in the shed. Waste is stored in this unit for greater than 90 days.

**Date of Startup:** This unit began operation in early 1977.

**Date of Closure:** The unit is active.

**Wastes Managed:** This unit manages iron hydroxide/nickel tank sludge (D002), contained in two 55-gallon drums in the back of the right side of the shed. According to Dr. Schrodts, this is 63% boric acid which will be recycled. This unit also manages lead oxide/chromate (D007/D008) from the plating tank



sludge. According to Dr. Schrodt, on December 10, 1990, 10,180 pounds was shipped by Metropolitan Environmental Inc. to Inmetco in Elwood City, Pennsylvania, and currently about 75 pounds remain from the recent cleanout of a tank. Trivalent chromium/hydroxide (F006/D007) from the former wastewater treatment system, is in a box on the right side of the shed. The box is about 2/3 full. According to Dr. Schrodt, Metropolitan Environmental will transport it to Encycle in Texas, which has agreed to process and recover the chrome from the waste. They are waiting for authorization from the State of Texas.

Chromium/condensed hexavalent mixed with soil and debris, and rust/chrome acid blower waste (D007), from cleaning the ventilation system, and retention basin sludge (D007), removed from beneath the process area, are in four cardboard boxes, about 2/3 full, in the middle of the shed. According to Dr. Schrodt, this will also be transported by Metropolitan Environmental to Encycle in Texas following authorization.

**Release Controls:**

This unit is a metal shed with a concrete floor.

**History of  
Documented Releases:**

No releases from this unit have been documented.

**Observations:**

During the VSI, the storage shed contained four cubic-yard containers of retention basin sludge in the center area; a cardboard box of chromium hydroxide to the right; behind that to the right of the shed, two 55-gallon drums of boric acid; to the left, a cardboard box container which contained chrome acid blower waste. The concrete floor did not appear to be cracked.

**SWMU 3**

**PLATING AREA**

**Unit Description:**

The plating area is located in the middle of the eastern half of the building. The unit includes plating baths, which are located in the center of the facility. This area consists of a hard chrome electroplater of large steel parts with nickel plating. Cleaning and polishing of chrome and nickel

parts are also performed. The unit measures as a 60 x 90-foot process area. This unit has a concrete floor (see Photograph No. 4).

Date of Startup: This unit began operation around 1945.

Date of Closure: The unit is active.

Wastes Managed: This unit managed hydrochloric acid/trivalent chromium, which is stored on SWMU 1, from stripping operations; hexavalent chromium/chrome plating solution, which is stored on SWMU 1, from tank cleaning; iron hydroxide/nickel tank sludge, which is stored in SWMU 2, from nickel tank cleaning; lead oxide/chromate, which is stored in SWMU 2, from cleaning plating tanks; retention basin sludge, which is stored in SWMU 2, generated from the pit beneath the process area; and trivalent chromium flakes, which is stored in SWMU 5, from removing impurities from the chromium tanks.

Release Controls: Underneath the plating bath is a 30 x 50-foot acid brick-lined pit. The pit has two sumps, one in the middle near the southern end and one at the western end. The sumps are set up so that spills would be pumped directly into a storm sewer drain on the western side of the pit. The method of spill control has been used at the facility since before Dr. Schrod's acquisition.

History of Documented Releases: Dr. Schrod's stated that on May 31, 1990, a release of chromic acid occurred when a plating bath overflowed and the fluid was pumped into the storm sewer drain. There was no documentation to review on the spill.

Observations: During the VSI, BVWST observed the plating baths to be intact. Part of the plating area is covered with wood plans, where the sump pumps are located. No evidence of a release was noted.

**SWMU 4****WASTEWATER TREATMENT SYSTEM**

**Unit Description:** The wastewater treatment system is located south of the plating area in the facility. The unit and a connected 3,000-gallon storage tank are no longer in use. In the original RCRA Part A, it was stated that the facility contained an 8,000-gallon S02 (storage tank). Dr. Schrodtt stated that the 8,000-gallon tank was actually the 3,000-gallon S02 (storage tank) connected to the wastewater treatment system (see Photograph No. 5).

**Date of Startup:** This unit began operations in 1976.

**Date of Closure:** The unit has been inactive since 1988.

**Wastes Managed:** This unit managed trivalent chromium/hydroxide. It received the waste generated when plated objects were rinsed off after they were removed from a plating tank.

**Release Controls:** This unit rested on a concrete floor.

**History of Documented Releases:** No releases from this unit have been documented.

**Observations:** BVWST observed that this unit has been dismantled and sits on a concrete floor. The floor did not appear to be stained or cracked.

**SWMU 5****LABORATORY**

**Unit Description:** The 16 x 18-foot laboratory was set up in the fall of 1978 on the western end of the old building. The unit consists of a spectrophotometer, pH meters, chemical titration meter, a direct current power source, hull cell (to determine current density) and a benchtop plating bath (see Photograph No. 6). The unit also stores metal waste from the plating area. A ceramic porous pot is used to remove trivalent chromium, iron, and copper ions from the plating baths. The impurities form a solid, flaky metal waste which is stored in this unit. To date, approximately one pound of metal

flakes have accumulated. Dr. Schrodts tests the flakes to determine if the waste can be recycled. (IEPA, 1990b).

Date of Startup:	This unit began operations in 1978.
Date of Closure:	This unit is active.
Wastes Managed:	This unit manages flakes of waste copper, iron and chrome.
Release Controls:	The flakes are retained in jars and plastic bags stored in the laboratory.
History of Documented Releases:	No releases from this unit has been documented.
Observations:	This unit has a concrete floor. BVWST did not observe any evidence of a release. The floor did not appear to be stained or cracked.

#### **4.0 AREAS OF CONCERN**

BVWST identified one AOC during the PA/VSI. This is discussed below.

##### **AOC 1 FIBER DRUMS OF OLD ACID BRICKS**

This unit is part of a concrete apron, located east of the hazardous waste container storage shed. This unit consists of several 55-gallon drums, lined with plastic bags, containing old acid bricks. These acid bricks were used to line the bottom of the chromium-plating baths. The bricks were used as a cushion for the baths in case a roller, while being plated, accidentally fell in a bath. The bricks would prevent the roller from puncturing the bath. These bricks were replaced with new bricks. Dr. Schrodt stated that these bricks will be used in the baths in the future. He stated that the bricks are coated with chromium. The storage area where these drums are located is very unkempt. Old equipment is piled around and on top of these containers. There is a very high possibility of these drums becoming punctured or knocked over by the careless stacking of the old equipment in this area (see Photograph No. 7).

## 5.0 CONCLUSIONS AND RECOMMENDATIONS

The PA/VSI identified five SWMUs and one AOC at the Dover Industrial Chrome facility. Background information on the facility's location, operations, waste generating processes, history of documented releases, regulatory history, environmental setting, and receptors is presented in Section 2.0. SWMU-specific information, such as the unit's description, dates of operation, wastes managed, release controls, history of documented releases, and observed condition, is discussed in Section 3.0. AOCs are discussed in Section 4.0. Following are BVWST's conclusions and recommendations for each SWMU and AOC. Table 3 follows this section and identifies the SWMUs and AOC at the Dover Industrial Chrome facility and suggested further actions.

### SWMU 1

#### DRUM STORAGE PAD

##### Conclusions:

This unit has evidence of leaks or spills due to the discoloration on the ground of the cracked concrete. Dr. Schrodt stated that a spill occurred at the end of 1990, which rusted a portion of the fence, from an unfastened lid on a 55-gallon drum. The potential for release to environmental media is detailed below.

Groundwater: Moderate.

There has been one documented spill at this unit, according to Dr. Schrodt. The concrete is cracked and stained, which indicates previous spills throughout this area.

Surface Water: Moderate.

This unit slopes toward a storm sewer drain just west of the drums. The indication of previous spills on concrete suggest that rain runoff could rinse the spill into the storm sewer drain.

Air: Low.

There is a low potential for release to air from this unit.

On-Site Soils: Moderate.

Soil on the eastern portion of this unit may still be contaminated from the contents of the spill. According to Dr. Schrodt, the soil analysis test results, after over a year, have not arrived.

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DATE

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Recommendations: BVWST recommends that soil samples underneath and around the concrete pad be taken because of the past spill and the staining and cracks in the concrete.

**SWMU 2**

**HAZARDOUS WASTE CONTAINER STORAGE SHED**

Conclusions: This unit has a low potential for release to groundwater, surface water, air, and on-site soils. The potential for release to environmental media is detailed below.

Groundwater: Low.

This unit has a concrete floor and is covered by a metal shed. Concrete did not appear to be cracked.

Surface Water: Low.

This unit has a concrete floor and is covered by a metal shed. Concrete did not appear to be cracked.

Air: Low.

This unit has a concrete floor and is covered by a metal shed. Concrete did not appear to be cracked.

On-Site Soils: Low.

This unit has a concrete floor and is covered by a metal shed. Concrete did not appear to be cracked.

Recommendations: BVWST recommends no further action for this unit.

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CONFIDENTIAL

**SWMU 3**

**PLATING AREA**

**Conclusions:**

This unit has a low potential for release to groundwater, air, and on-site soils.

This unit has a moderate potential for release to surface water. The potential for release is detailed below.

Groundwater: Low.

The plating area is located in the machine shop which has a concrete floor. There are also sump collection baths underneath the plating baths.

Surface Water: Moderate.

The two sumps in the sump collection baths handle the spills and overflow from this unit, which is discharged into the storm sewer drain. The storm and sanitary sewers are combined and lead to the Skokie Processing Plant.

Air: Low.

This unit has a low potential for release to the air.

On-Site Soils: Low.

The plating area is located in the machine shop which has a concrete floor. There are also sump collection baths underneath the plating baths in case there is any overflow from the plating tanks.

**Recommendations:**

BVWST recommends that the facility hook the pumps into some type of wastewater treatment or circulate it back into the baths instead of discharging it into the storm sewer drain. Based on the manner of release of chromic acid on May 31, 1991, into the storm sewer drain, water treatment or recirculation would prevent a recurrence.

**SWMU 4**

**WASTEWATER TREATMENT SYSTEM**

**Conclusions:**

The unit has a low potential for release to groundwater, surface water, air, and on-site soil. This unit is dismantled and located on top of a concrete floor.

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Groundwater: Low.

This unit is located on a concrete floor and was dismantled in 1988. This unit has a low potential for release to this medium.

Surface Water: Low.

This unit is located on a concrete floor and was dismantled in 1988. This unit has a low potential for release to this medium.

Air: Low.

This unit is located on a concrete floor and was dismantled in 1988. This unit has a low potential for release to this medium.

On-Site Soils: Low.

This unit is located on a concrete floor and was dismantled in 1988. The unit has a low potential for release to this medium.

Recommendations: BVWST recommends no further action for this unit.

#### SWMU 5

#### LABORATORY

Conclusions: The potential for release to groundwater, surface water, air, and on-site soils is low. This unit is where the metal flakes generated from the porous pot are stored. The flakes are tested to determine if waste will be useful. The potential for release to environmental media is detailed below.

Groundwater: Low.

This unit is located on a concrete floor in the building. The potential of a release to this medium is low.

Surface Water: Low.

This unit is located on a concrete floor in the building. The potential of a release to this medium is low.

Air: Low.

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This unit is located on a concrete floor in the building. The potential of a release to the medium is low.

On-Site Soils: Low.

This unit is located on a concrete floor in the building. The potential of a release to the medium is low.

Recommendations: BVWST recommends no further action for this unit.

#### AOC 1

#### FIBER DRUMS OF OLD ACID BRICKS

Conclusions: The potential for release to groundwater, surface water, air, and on-site soil is moderate. The potential for release to environmental media is detailed below.

Groundwater: Low.

There is a low potential for release to this medium from this unit.

Surface Water: Moderate.

There is a moderate potential for a release to this medium. The old equipment pile surrounding this unit may puncture or knock down these drums and rain would rinse chromium residue to the storm sewer drain located east of this unit.

Air: Low.

There is a low potential for release to the medium from this unit.

On-Site Soils: Moderate.

There is a moderate potential for a release to this medium. The old equipment pile surrounding this unit may puncture or knock down the drums, allowing residues/liquids to impact the soil north of this unit.

Recommendations: BVWST recommends that the facility isolate the drums from the old equipment piled in this area. This action will greatly reduce the potential of chromium release for this unit.

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TABLE 3  
SWMU AND AOC SUMMARY

<u>SWMU</u>	<u>Dates of Operation</u>	<u>Evidence of Release</u>	<u>Suggested Further Action</u>
1. Drum Storage Pad	1978 to present	Spill from 55 gallon drum due to the lid not being fastened down.	Take soil samples underneath and around the stained and cracked concrete pad
2. Hazardous Waste Container Storage Shed	1979 to present	None	No further action at this time
3. Plating Area	1945 to present	Chromic Acid was discharged into storm sewer drain.	Connect sump pumps to some type of wastewater treatment instead of discharging into storm sewer drain
4. Wastewater Treatment System	1976 to 1988	None	No further action at this time
5. Laboratory	1978 to present	None	No further action at this time
<u>AOC</u>			
1. Fiber Drums of Old Acid Bricks	1978 to present	None	Isolate drums on this unit from the rest of the old equipment surrounding this unit

RELEASED *g/11/02*  
DATE \_\_\_\_\_  
RIN # \_\_\_\_\_  
INITIALS *g/11/02*

## REFERENCES

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**ATTACHMENT A**

**EPA PRELIMINARY ASSESSMENT FORM 2070-12**



POTENTIAL HAZARDOUS WASTE SITE  
PRELIMINARY ASSESSMENT  
PART 1 - SITE INFORMATION AND ASSESSMENT

I. IDENTIFICATION

01 STATE IL 02 SITE NUMBER IL D 005125588

II. SITE NAME AND LOCATION

01 SITE NAME (Legal, common, or descriptive name of site) Dover Industrial Chrome, Inc.		02 STREET, ROUTE NO. OR SPECIFIC LOCATION IDENTIFIER 2929 N. Campbell Avenue			
03 CITY Chicago	04 STATE IL	05 ZIP CODE 60618	06 COUNTY Cook	07 COUNTY CODE 031	08 CONG DIST
09 COORDINATES: LATITUDE 41° 56' 5.3"N		LONGITUDE 87° 41' 23.4"W			
10 DIRECTIONS TO SITE (Starting from nearest public road) From Chicago Loop (downtown): Go north on JFK (90/94 expressway), exit going east on Diversey, go 4 blocks and turn north on Campbell, go 1/2 block to 2929 N. Campbell.					

III. RESPONSIBLE PARTIES

01 OWNER (if known) Dr. Ariel Schrodt		02 STREET (Business, mailing residential) 2801 Sheridan Pl.			
03 CITY Evanston	04 STATE IL	05 ZIP CODE 60201	06 TELEPHONE NUMBER (312) 328-0121		
07 OPERATOR (if known and different from owner)		08 STREET (Business, mailing, residential)			
09 CITY	10 STATE	11 ZIP CODE	12 TELEPHONE NUMBER		
13 TYPE OF OWNERSHIP (Check one) <input checked="" type="checkbox"/> A. PRIVATE <input type="checkbox"/> B. FEDERAL: _____ (Agency Name) <input type="checkbox"/> F. OTHER _____ (Specify) <input type="checkbox"/> C. STATE <input type="checkbox"/> D. COUNTY <input type="checkbox"/> E. MUNICIPAL <input type="checkbox"/> G. UNKNOWN					
14. OWNER/OPERATOR NOTIFICATION ON FILE (Check all that apply) <input type="checkbox"/> A. RCRA 3010 DATE RECEIVED: 11/18/80 <input type="checkbox"/> B. UNCONTROLLED WASTE SITE (CERCLA 103 c)    DATE RECEIVED: ____/____/____ MONTH DAY YEAR    MONTH DAY YEAR <input type="checkbox"/> C. NONE					

IV. CHARACTERIZATION OF POTENTIAL HAZARD

01 ON SITE INSPECTION <input checked="" type="checkbox"/> YES    DATE 12/20/91 <input type="checkbox"/> NO		BY (Check all that apply) <input type="checkbox"/> A. EPA <input checked="" type="checkbox"/> B. EPA CONTRACTOR <input type="checkbox"/> C. STATE <input type="checkbox"/> D. OTHER CONTRACTOR <input type="checkbox"/> E. LOCAL HEALTH OFFICIAL <input type="checkbox"/> F. OTHER: _____ (Specify) CONTRACTOR NAME(S): B&V Waste Science and Technology Corp.			
02 SITE STATUS (Check one) <input checked="" type="checkbox"/> A. ACTIVE <input type="checkbox"/> B. INACTIVE <input type="checkbox"/> C. UNKNOWN		03 YEARS OF OPERATION 1945   Present <input type="checkbox"/> UNKNOWN BEGINNING YEAR ENDING YEAR			
04 DESCRIPTION OF SUBSTANCES POSSIBLY PRESENT, KNOWN, OR ALLEGED Metals, Acids (toxic persistent, corrosive)					
05 DESCRIPTION OF POTENTIAL HAZARD TO ENVIRONMENT AND/OR POPULATION Soil, surface water, ground water, air					

V. PRIORITY ASSESSMENT

01 PRIORITY FOR INSPECTION (Check one. If high or medium is checked, complete Part 2 - Waste information and Part 3 - Description of Hazardous Conditions and Incidents.) <input type="checkbox"/> A. HIGH (inspection required promptly) <input checked="" type="checkbox"/> B. MEDIUM (inspection required) <input type="checkbox"/> C. LOW (inspect on time-available basis) <input type="checkbox"/> D. NONE (No further action needed; complete current disposition form)			
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VI. INFORMATION AVAILABLE FROM

CONTACT Kevin Pierard		02 OF (Agency/Organization) U.S. EPA		03 TELEPHONE NUMBER (312) 886-4448	
04 PERSON RESPONSIBLE FOR ASSESSMENT Mitch Balek, Tim Moody		05 AGENCY	06 ORGANIZATION BVWST	07 TELEPHONE NUMBER (312) 346-3775	08 DATE 2/16/92 MONTH DAY YEAR



EPA

POTENTIAL HAZARDOUS WASTE SITE  
PRELIMINARY ASSESSMENT  
PART 2 - WASTE INFORMATION

## 1. IDENTIFICATION

01 STATE

IL

02 SITE NUMBER

ILD 005125588

## II. WASTE STATES, QUANTITIES, AND CHARACTERISTICS

## 01 PHYSICAL STATES (Check all that apply)

- ☐ A. SOLID ☐ E. SLURRY  
☐ B. POWDER, FINES ☒ F. LIQUID  
☐ C. SLUDGE ☐ G. GAS

☐ D. OTHER \_\_\_\_\_  
 (Specify)

## 02 WASTE QUANTITY AT SITE

(Measures of waste quantities  
must be independent)

TON \_\_\_\_\_

CUBIC YARDS \_\_\_\_\_

NO. OF DRUMS \_\_\_\_\_

## 03 WASTE CHARACTERISTICS (Check all that apply)

- ☐ A. TOXIC ☐ H. IGNITABLE  
☐ B. CORROSIVE ☐ I. HIGHLY VOLATILE  
☐ C. RADIOACTIVE ☐ J. EXPLOSIVE  
☐ D. PERSISTENT ☐ K. REACTIVE  
☐ E. SOLUBLE ☐ L. INCOMPATIBLE  
☐ F. INFECTIOUS ☐ M. NOT APPLICABLE  
☐ G. INFLAMMABLE

## III. WASTE TYPE

CATEGORY	SUBSTANCE NAME	01 GROSS AMOUNT	02 UNIT OF MEASURE	03 COMMENTS
SLU	SLUDGE			
OLW	OILY WASTE			
SOL	SOLVENTS			
PSD	PESTICIDES			
OCC	OTHER ORGANIC CHEMICALS			
IOC	INORGANIC CHEMICALS			
ACD	ACIDS	1210	Gallons	
BAS	BASES			
MES	HEAVY METALS	5-10	DR	

## IV. HAZARDOUS SUBSTANCES (See Appendix for most frequently cited CAS Numbers)

CATEGORY	02 SUBSTANCE NAME	03 CAS NUMBER	04 STORAGE/DISPOSAL METHOD	05 CONCENTRATION	06 MEASURE OF CONCENTRATION
ACD	Hydrochloric acid/trivalent chromium	D002/D007	Plastic drums	Unknown	
MES	Hexavalent chromium/chrome plating solution	D007	Plastic drums	Unknown	
SLU	Iron hydroxide/nickel tank sludge	D002	Metal container	Unknown	
MES	Lead oxide/chromate	D007/D008	Metal container	Unknown	
SLU	Chrome hydroxide	F006/D007	Box container	Unknown	
SLU	Retention basin sludge	D007	Box container	Unknown	

(Continued)

## V. FEEDSTOCKS (See Appendix for CAS Numbers)

CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER	CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER
FDS			FDS		
FDS			FDS		

## VI. SOURCES OF INFORMATION (Cite specific references; e.g., state files, sample analysis, reports)



POTENTIAL HAZARDOUS WASTE SITE  
PRELIMINARY ASSESSMENT  
PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION

01 STATE

IL

02 SITE NUMBER

IL D 005125588

II. HAZARDOUS CONDITIONS AND INCIDENTS

01 ☒ A. GROUNDWATER CONTAMINATION

02 ☐ OBSERVED (DATE: \_\_\_\_\_)

☒ POTENTIAL

☐ ALLEGED

03 POPULATION POTENTIALLY AFFECTED: \_\_\_\_\_

04 NARRATIVE DESCRIPTION

Potential soil contamination could affect groundwater.

01 ☒ B. SURFACE WATER CONTAMINATION

02 ☐ OBSERVED (DATE: \_\_\_\_\_)

☒ POTENTIAL

☐ ALLEGED

03 POPULATION POTENTIALLY AFFECTED: \_\_\_\_\_

04 NARRATIVE DESCRIPTION

600' from N. Branch of Chicago River.

01 ☒ C. CONTAMINATION OF AIR

02 ☐ OBSERVED (DATE: \_\_\_\_\_)

☒ POTENTIAL

☐ ALLEGED

03 POPULATION POTENTIALLY AFFECTED: \_\_\_\_\_

04 NARRATIVE DESCRIPTION

Venting stacks could emit chromium and nickel contaminated particulates.

01 ☐ D. FIRE/EXPLOSIVE CONDITIONS

02 ☐ OBSERVED (DATE: \_\_\_\_\_)

☐ POTENTIAL

☐ ALLEGED

03 POPULATION POTENTIALLY AFFECTED: \_\_\_\_\_

04 NARRATIVE DESCRIPTION

None documented or observed

01 ☐ E. DIRECT CONTACT

02 ☐ OBSERVED (DATE: \_\_\_\_\_)

☐ POTENTIAL

☐ ALLEGED

03 POPULATION POTENTIALLY AFFECTED: \_\_\_\_\_

04 NARRATIVE DESCRIPTION

None documented or observed

01 ☒ F. CONTAMINATION OF SOIL

02 ☐ OBSERVED (DATE: \_\_\_\_\_)

☒ POTENTIAL

☐ ALLEGED

03 AREA POTENTIALLY AFFECTED: \_\_\_\_\_

04 NARRATIVE DESCRIPTION

(Acres)

There was a spill at the drum storage pad. Also, possibility of contact at area of the fiber drums of old acid bricks exists.

01 ☒ G. DRINKING WATER CONTAMINATION

02 ☐ OBSERVED (DATE: \_\_\_\_\_)

☒ POTENTIAL

☐ ALLEGED

03 POPULATION POTENTIALLY AFFECTED: \_\_\_\_\_

04 NARRATIVE DESCRIPTION

Very few active wells within 3 miles, if any. None documented or observed.

01 ☒ H. WORKER EXPOSURE/INJURY

02 ☐ OBSERVED (DATE: \_\_\_\_\_)

☒ POTENTIAL

☐ ALLEGED

03 POPULATION POTENTIALLY AFFECTED: \_\_\_\_\_

04 NARRATIVE DESCRIPTION

To metal Cr6, Pb dust.

01 ☐ I. POPULATION EXPOSURE/INJURY

02 ☐ OBSERVED (DATE: \_\_\_\_\_)

☐ POTENTIAL

☐ ALLEGED

03 POPULATION POTENTIALLY AFFECTED: \_\_\_\_\_

04 NARRATIVE DESCRIPTION

None documented or observed





POTENTIAL HAZARDOUS WASTE SITE  
PRELIMINARY ASSESSMENT  
PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION

01 STATE 02 SITE NUMBER  
IL D 065418353

II. HAZARDOUS CONDITIONS AND INCIDENTS (Continued)

01 ☐ J. DAMAGE TO FLORA  
04 NARRATIVE DESCRIPTION

02 ☐ OBSERVED (DATE: \_\_\_\_\_)

☐ POTENTIAL

☐ ALLEGED

None documented or observed

01 ☐ K. DAMAGE TO FAUNA  
04 NARRATIVE DESCRIPTION

02 ☐ OBSERVED (DATE: \_\_\_\_\_)

☐ POTENTIAL

☐ ALLEGED

None documented or observed

01 ☐ L. CONTAMINATION OF FOOD CHAIN  
04 NARRATIVE DESCRIPTION

02 ☐ OBSERVED (DATE: \_\_\_\_\_)

☐ POTENTIAL

☐ ALLEGED

None documented or observed

01 ☒ M. UNSTABLE CONTAINMENT OF WASTES  
03 POPULATION POTENTIALLY AFFECTED: \_\_\_\_\_

02 ☐ OBSERVED (DATE: \_\_\_\_\_)

☒ POTENTIAL

☐ ALLEGED

04 NARRATIVE DESCRIPTION

Drum storage area is not bermed or diked and there are cracks on concrete. Ground slopes to combined sewer.

01 ☐ N. DAMAGE TO OFF-SITE PROPERTY  
04 NARRATIVE DESCRIPTION

02 ☐ OBSERVED (DATE: \_\_\_\_\_)

☐ POTENTIAL

☐ ALLEGED

None documented or observed

01 ☒ O. CONTAMINATION OF SEWERS, DRAINS, WWTPS  
04 NARRATIVE DESCRIPTION

02 ☐ OBSERVED (DATE: \_\_\_\_\_)

☒ POTENTIAL

☐ ALLEGED

See M. above. Also, plating area has 2 sumps which pump any spilling into combined sewer drain.

01 ☐ P. ILLEGAL/UNAUTHORIZED DUMPING  
04 NARRATIVE DESCRIPTION

02 ☐ OBSERVED (DATE: \_\_\_\_\_)

☐ POTENTIAL

☐ ALLEGED

None documented or observed

05 DESCRIPTION OF ANY OTHER KNOWN, POTENTIAL, OR ALLEGED HAZARDS

None documented or observed

III. TOTAL POPULATION POTENTIALLY AFFECTED: \_\_\_\_\_

IV. COMMENTS

V. SOURCES OF INFORMATION (Cite specific references; e.g., state files, sample analysis, reports)

**ATTACHMENT B**

**VISUAL SITE INSPECTION SUMMARY AND PHOTOGRAPHS**

## **VISUAL SITE INSPECTION SUMMARY**

Dover Industrial Chrome Inc.  
Chicago, Illinois  
ILD 005 125 588

Date: December 20, 1991

Facility Representatives: Dr. Areil Schrodtt, Owner  
Henry Szanziewicz, Environmental Consultant

Inspection Team: Mitchell P. Balek, B&V Waste Science and Technology Corp.  
Timothy Moody, B&V Waste Science and Technology Corp.

Photographer: Mitchell P. Balek, B&V Waste Science and Technology Corp.

Weather Conditions: Windy, temperature about 30°F.

Summary of Activities: The visual site inspection (VSI) began at 10:30 a.m. with an introductory meeting. The inspection team discussed the purpose of the VSI and the agenda for the visit. Facility representatives then discussed Dover Industrial Chrome past and current operations, solid wastes generated, and release history. Most of the information was exchanged on a question-and-answer basis.

The VSI tour began at 1:15 p.m. During the tour, photographs were taken of all solid waste management areas and areas of concern. The production process was further explained.

The tour concluded at 2:10 p.m. after which the inspection team held an exit meeting with the facility representatives. The VSI was completed and the inspection team left the facility at 2:15 p.m.



Photograph No. 1  
 Orientation: East  
 Description: Drum storage pad and fence along the eastern border of property.

Location: SWMU 1  
 Date: 12/20/91



Photograph No. 2  
 Orientation: Northeast  
 Description: Inside of the hazardous waste container storage shed.

Location: SWMU 2  
 Date: 12/20/91



Photograph No. 3  
 Orientation: Northeast  
 Description: Inside of the hazardous waste container storage shed.

Location: SWMU 2  
 Date: 12/20/91



Photograph No. 4  
 Orientation: Northwest  
 Description: Plating Area.

Location: SWMU 3  
 Date: 12/20/91



Photograph No. 5  
Orientation: Northwest  
Description: Area of the dismantled wastewater treatment system.

Location: SWMU 4  
Date: 12/20/91





Photograph No. 6  
 Orientation: Southeast  
 Description: Inside of the laboratory.

Location: SWMU 5  
 Date: 12/20/91



Photograph No. 7  
 Orientation: Northwest  
 Description: Fiber drums of old acid bricks and surrounding debris.

Location: AOC 1  
 Date: 12/20/91

**ATTACHMENT C**

**VISUAL SITE INSPECTION FIELD NOTES**



ts (continued)

RFA

Dover Industrial  
chrome Inc.

Inspection;  
December 20, 1991

B4V Waste Science  
& Technology Corp.  
101 W. Wacker, Ste. 1100  
Chicago, IL 60606

(312) 346-3775

Mitch Bales  
Tim Moody

Tim Moody 12/20/91

Tim Moody 12/20/91

Tim Moody 12/20/91

Tim Moody 12/20/91 2

Tim Moody 12/20/91

Tim Moody 12/20/91

Jim Moody

12/20/91

3

Jim Moody 12/20/91 4  
Friday December 20, 1991

Weather: cold & rainy;  
mid - 30s, drizzling  
rain.

10:30 a.m. met Henry  
Szadziwicz who is  
an environmental  
consultant with Industrial  
Environmental Compliance,  
Inc.

They made one  
shipment on December 12.  
② → azules in  
Elwood City, PA.  
Transported by  
Metropolitan Environmental  
Inc.

They cannot afford  
the liability insurance  
that Part B status would  
require.

Jim Moody 12/20/91

Jim Moody 12/20/91

Jim Moody 12/20/91 5

Denver is intending closure to become just a generator. There has been a lot of waste the past 6-8 years.

3:30 a.m. - Dr. Ariel Schroot, owner, arrived.

They are in the process of filing for closure. Wastes and transportation are lined up for disposal.

They want to recover Chrome.

~~Jim Moody 12/20/91~~

Jim Moody 12/20/91

Jim Moody 12/20/91 6

## Waste Streams

Waste Stream #1 - In storage area - trying to eliminate by purple solution, etc. eliminated Chromium

They've started this already and it has been working

This is not an ongoing waste stream

No plans to ship off

EPA # Chrome D007  
D003

~~Jim Moody 12/20/91~~

Jim Moody 12/20/91

Tim Moody 12/20/91 7  
Waste stream #2 - Platin  
tank sludge - shed  
The ground was cracked  
and concrete stained  
from possible spills  
formation of lead  
mate.

This is an ongoing  
stream

# 0008 with lead  
0007 for chrome

10,180 pounds were  
shipped for recycling

Tim

12/20/91

Tim Moody 12/20/91

Tim Moody 12/20/91 8  
Waste stream #3 - Blow  
Waste  
This is an ongoing  
waste stream

# 0007  
0008

Manifest with analysis  
(of lead content) of  
what shipped, but  
doesn't believe there  
was a mistake and  
there was no new  
analysis.

Waste stream #4 - spent  
hydrochloric acid

This is an ongoing  
stream

Everything required  
stopping before processing  
Tim Moody 12/20/91

Jim Moody 12/20/91  
for customers, but  
fluctuates

# 003 corrosive  
007 chrome

Waste stream #5 - Waste,  
Water Treatment Sludge

Did it early on  
to reduce hex chrome  
→ generate sludge, filter  
waste water

This is dismantled  
and not generating → still  
→ still holding the  
material, but no  
more sludge being  
generated → it's clear  
about 3-4 years

They're taking the system  
apart

The process was discontinued  
Jim Moody 12/20/91

Jim Moody 12/20/91, 12  
the end of 1988.

Waste stream #6 -

abrasive polishing -  
generates worn out  
belts → tossed into dumpster.  
Sometimes there's a  
coating of chrome/metal  
on the belts  
Also, chrome/  
metallic parts (iron)  
→ solid dust

Waste Stream #7 - They  
do nickel plating

The nickel has  
chloric acid (they add  
chloric acid in solution  
Sometimes shop  
and temperatures cool and  
acid crystallizes and  
drops to the bottom of  
Jim Moody 12/20/91



Jim Moody 12/20/91  
the tank. Over time,  
cake of chloric acid  
builds up on ~~bottom~~ <sup>at the bottom</sup> of  
the tank. Sometimes  
they have to change  
the solution

Drums are stored  
outside. They recycle  
the nickel solution

The chloric is stored  
in the shed, but is  
considered material  
for recycling

The iron oxide/  
chloric acid mix settles &  
it is easy to filter out  
iron oxide

Jim Moody 12/20/91

Jim Moody 12/20/91 12  
The nickel solution  
is stored for recycling

They pumped platin  
(nickel, nickel sulphate,  
chloric acid) solution  
into drums & they're  
stored outside until  
they can be purified

There is no estimate  
of how much total ~~of~~ <sup>of</sup> waste generated

Much is cleaning,  
which is once or  
twice a year → accumulation  
is sporadic & never  
on a continuous  
schedule.

Lead chromate - platin  
bottom sludge → on Dec  
10th, accumulation of  
Jim Moody 12/20/91.

Tim Moody 12/20/91 13  
4 years was 10,130 pounds  
It was shipped off?  
Inmate in Elwood  
City, PA - transported  
by Metropolitan Envir.  
Inc.

There was uncertainty  
about whether 5th. other  
possible waste streams,  
such as the general  
flow of packaging  
material (wooden crates,  
wraps, corrugated  
cardboard); cleaner  
or mineral spirits  
generally used for  
wiping, w/ paper towels  
(to degrease bearings  
and rolls)

2/2/91

Tim Moody 12/20/91

Tim Moody 12/20/91 14  
SMUs

(1) Outside, Hazardous  
Waste Storage Area  
portion of charges  
paid. Began storing  
in 1978; active.

(2) Metal shed → stored  
longer than 90 days;  
active → (was inspection:  
ground cracked and concrete  
stained from possible spills)

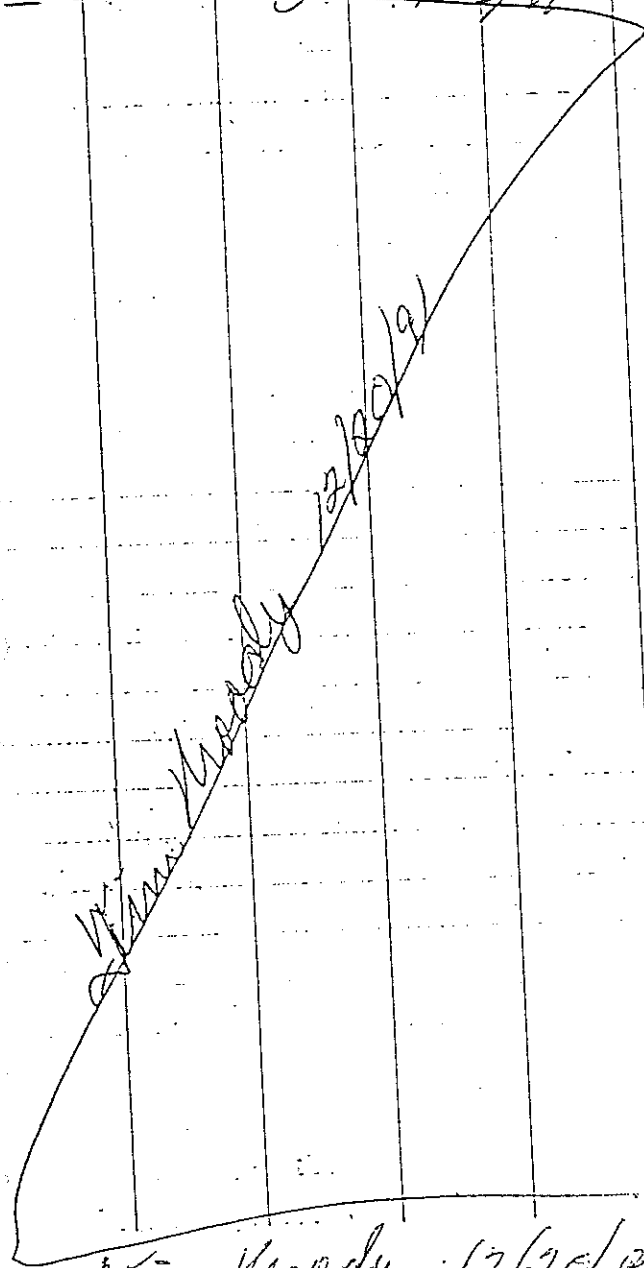
(3) Isolation unit →  
dismantled a couple  
of years ago (inactive  
in 1989). It started  
up in late 1986.

(4) Pitting Area → built  
in 1945; active.

(5) 3 dlew stacks on the way.  
Tim Moody 12/20/91



Tim Moody 12/20/91 15



Tim Moody 12/20/91

Tim Moody 12/20/91 16

(6) Satellite Dumpster -  
contained debris - It's  
about 10 cubic yards  
- There's also waste  
in there from Sherwood  
Enterprises (in mid section  
of building) - sells used  
cars - cardboard, tape.

(7) Waste Water Treatment  
system - inactivated  
in the end of 1988  
- It generated sludge  
(FOOG)  
- A 3,000 gallon  
storage tank hooked  
up to it & is no longer  
in use - settling basin -  
cleaned out (inactive)

A 500-gallon treatment  
unit - ion exchange

Tim Moody 12/20/91

Tim Moody 12/20/91 17  
purifier → contemplated  
but never established  
→ The tank's solution

Also, there's an  
outside storage area

He has drums  
won't use and may  
sell. Some were never  
opened → variety of  
chemicals not necessarily  
related to this ongoing  
business

There is also a <sup>up to</sup> ceramic  
porous pot. It has an  
internal electrode with lead  
→ iron/chromium  
accumulation on electrode  
Tim Moody 12/20/91

Tim Moody 12/20/91 18  
Any release from  
SMVs? Yes: release from  
outside ramp at east  
fence (of liquid) on  
soil.

Samples were  
taken of 1-2 feet area  
→ They're in the process  
of analysis at Henry's  
Company. The spill  
was about year ago  
A tank/drum  
tipped and the cap wasn't  
all on. It corroded a  
fence → right at the  
property line

It's not buried  
The starting  
date of the ramp was  
1978.

Storage shed (active)  
startup date, early 1977  
Genel 2 will occur  
for sampling and  
possible cleanup

Tim Moody 12/20/91

Tim Moody 12/20/91 19

The Isolation Unit

Startup date: 1978 (inactive since 1989)

Plating area: 1945 - active

Blower stacks: starting round 1945 - active

Drumster: beginning in 1976 - active

Wastewater treatment system: 1976, inactive since 1988.

### Processes

Chrome Plating  
Nickel Plating  
Polishing  
Electropolishing

T.M.

Tim Moody 12/20/91

Tim Moody 12/20/91 20

Waste stream #2 was put in shed. #3 to shed with chucker that was triple rinsed. #4 - use & reuse -> ultimately, acid strength ineffectively put into 55-gallon drum -> cap -> waste from its own process -> drum ends up on ramp

Waste water treatment sludge discontinued.

Boric acid -> shed  
Nickel solution -> cap ramp adjacent to the shed.

Break from 1230 - 1245

Tim Moody 12/20/91

Tim Moody 12/20/91

21

Tim Moody 12/20/91 22  
electroplating →  
use of sulfuric  
acid → eventually  
will create waste  
stream → dissolving away  
stainless steel.

plating tank  
sludge → scoop up with  
shovel & put into  
large can for  
storage or transport  
→ use double  
plastic lining

Bucket & contents  
poured into plastic  
lined containers/drum  
in shed.

Tim Moody 12/20/91

Tim Moody 12/20/91

Tim Moody 12/20/91

23

Tim Moody 12/20/91 24  
The facility is  
not near any industrial  
park.

Bordering industries:  
Advance Transformers  
to the north. To the east,  
building occupied by  
Chop Shop → prebuilt  
cars → used to be  
screw machine house  
→ building for sale  
To the south is  
Midwest Crumplin  
Palmer Metal Products  
to the west across the  
street → stamping  
fabrication of sheet  
metal.

To the east is  
6 feet of barbed  
wire security fencing  
up to the Advance  
Transformers building  
from 8-foot gate.  
Tim Moody 12/20/91

Tim Moody: 12/20/91

25  
Jim Moody 12/20/91  
at the east end,  
six feet fence and  
rail with razor wire  
and 8-foot gate

total 3 locked gates

The nearest surface  
water: North branch  
of the Chicago River  
which flows southeast  
along northeast of  
Wacker.

Storm water  
runoff goes into public  
sewer

Don't think there's  
a public flood plain

Drinking water →  
City of Chicago

Jim Moody 12/20/91

26  
Jim Moody 12/20/91  
The property is  
1.03 acres.

Nearest residence is  
about 150 feet to the  
west, in Chicago.

The nearest school  
is on Ariversey towards  
California, about  
4 blocks southwest.  
Lane Tech. is  
about five blocks north.

There is only one  
work shift now:  
8-430 Mon. - Fri.

Security: television  
surveillance. Also,  
a permanent electrical  
engineer lives here  
24 hrs., 7 day/week (not  
an employee)

Jim Moody 12/20/91



Tim Moody 12/20/91 27

There are 14 employees

No groundwater is used

There are no known wells

No sensitive areas of endangered species

The north end of the Chicago River runs near sewer conducts sewage

He has owned the property since 1978

Tim. → it was although the company was established in 1945 → it was a new corporation under his operation since 1976

It is in an Intern States now

He has not filed for Part B permit

Tim Moody 12/20/91

Tim Moody 12/20/91 28  
Yes, the facility has expanded to electroforming

The florist is gone and the space is used for storage of odds and ends.

Gifford Investments (Real Estate Management Firm) is also in the building

The lab is still active and still tests → primarily the hydrochloric strip acid → tests periodically → has bottles of samples from each drum, ion ramp

The lab was activated in the latter part of 1978.

Tim Moody 12/20/91

~~Jim Moody 12/20/91~~

29

~~12/20/91~~

~~Moody~~

~~Jim~~

Jim Moody 12/20/91

Jim Moody 12/20/91 30  
The drums are lined  
with bricks to protect  
tank → to avoid shock  
(Bricks outside or  
concrete pad)

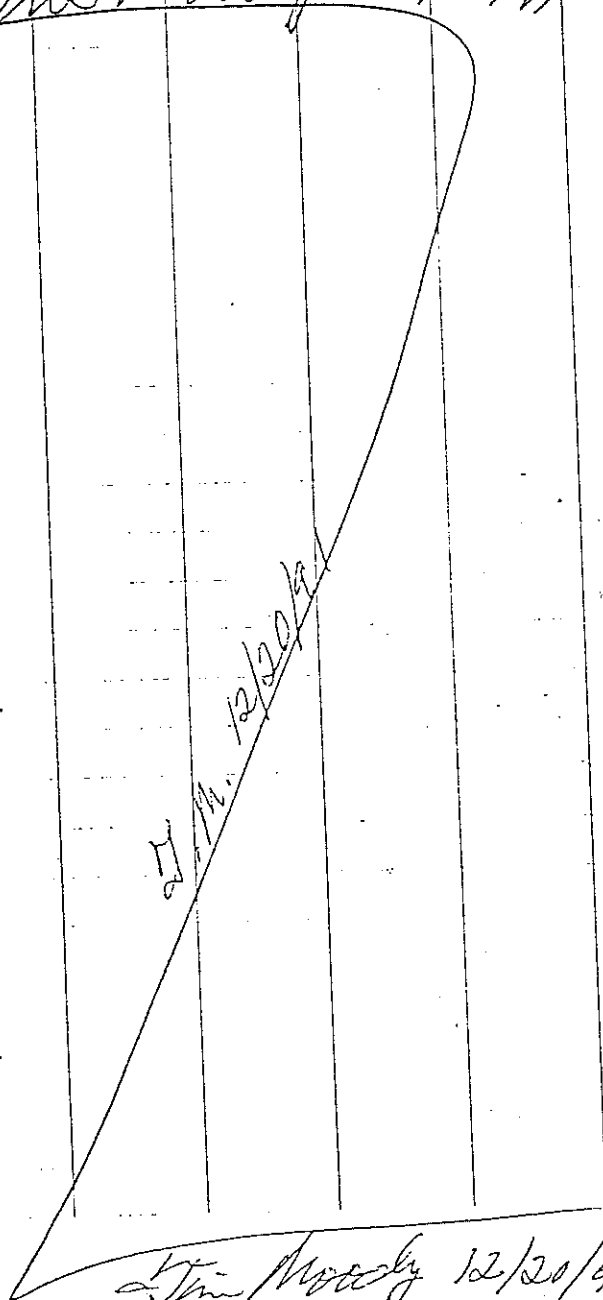
27-foot tank was  
totally brick lined  
Also, put in plastic  
plates of bottom of  
surface → a hydraulic  
cushion to protect tank  
lining → the bricks have  
never been analyzed.

~~27.11.12/20/91~~

Jim Moody 12/20/91



Tim Moody 12/20/91 31



Tim Moody 12/20/91

Tim Moody 12/27/91 32

### Photo Locations - VSI

Starting at 1:15 p.m.

Photo 1: Facing southeast  
of the analytical lab

Photo 2: Facing northeast  
of the inside of the  
storage shed with  
tanks, boxes

Photo 3: Facing northwest  
of inside of storage  
shed

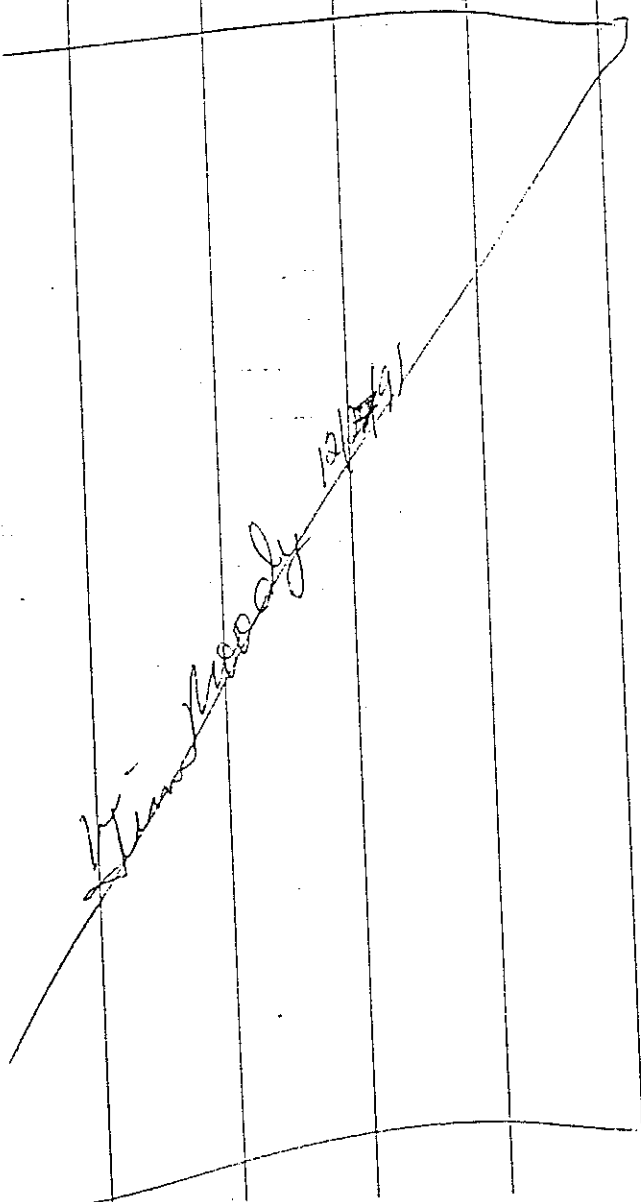
Photo 4: Facing northwest  
of

Photo 5: Facing east of  
storage drums.

Photo 6: Facing south of  
dumpster

Tim Moody 12/27/91

Timothy F. Moody 12/27/91



Kim Moody 12/27/91

Timothy Moody 12/27/91 34  
Photo 7: facing northwest  
of blowers

Photo 8: facing northwest  
of previous location  
of distillation unit

Photo 9: facing northwest  
of plating area

Photo 10: facing northwest  
of the Bismarck  
water water treatment  
system

Photo 11: facing northwest  
of

VSI completed at  
2:15 p.m.

Kim Moody 12/27/91



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**

**REGION 5**

**230 SOUTH DEARBORN ST.**

**CHICAGO, ILLINOIS 60604**

REPLY TO THE ATTENTION OF:

December 12, 1991

5HR-12

Dr. Ariel Schrodt  
Dover Industrial Chrome, Inc.  
2929 North Campbell Avenue  
Chicago, IL 60618

Re: Visual Site Inspection  
Dover Industrial Chrome, Inc  
Chicago, IL  
ILD 005 125 588

Dear Dr. Schrodt:

The United States Environmental Protection Agency (U.S. EPA) Region V will conduct a Preliminary Assessment including a Visual Site Inspection (PA/VSI) at the referenced facility. This inspection is conducted pursuant to the Resource Conservation and Recovery Act, as amended (RCRA) Section 3007 and the Comprehensive Environmental Response, Compensation, and Liability Act, as amended (CERCLA) Section 104 (e). The referenced facility has generated, treated, stored, or disposed of hazardous waste subject to RCRA. The PA/VSI requires identification and systematic review of all solid waste streams at the facility. The objective of the PA/VSI is to determine whether or not releases of hazardous wastes or hazardous constituents have occurred or are occurring at the facility which may require further investigation. This analysis will also provide information to establish priorities for addressing any confirmed releases.

The visual site inspection of your facility is to verify the location of all solid waste management units (SWMUs) and areas of concern (AOCs), and to make a cursory determination of their condition by visual observation. The definitions of SWMUs and AOCs are included in Attachment 1. The VSI supplements and updates data gathered during a preliminary file review. During this site inspection, no samples will be taken. A sampling visit to ascertain if releases of hazardous waste or constituents have occurred may be required at a later date.

Assistance of some of your personnel may be required in reviewing solid waste flow(s) or previous disposal practices. The site inspection is to provide a technical understanding of the present and past waste flows

and handling, treatment, storage, and disposal practices. Photographs of the facility are necessary to document the condition of the units at the facility and the waste management practices used.

The VSI has been scheduled for December 20, 1991. The inspection team will consist of personnel of B&V Waste Science & Technology Corp., a contractor for the U.S. EPA. Representatives of the Illinois Environmental Protection Agency (IEPA) may also be present. Your cooperation in admitting and assisting them while on site is appreciated.

The U.S. EPA recommends that personnel who are familiar with present and past manufacturing and waste management activities be available during the VSI. Access to any relevant maps, diagrams, hydrogeologic reports, environmental assessment reports, sampling data sheets, environmental permits (air, NPDES), manifests and/or correspondence is also necessary, as such information is needed to complete the PA/VSI.

If you have any questions, please contact me at (312) 886-4448 or Francine Harris at (312) 886-2884. A copy of the Preliminary Assessment/Visual Site Inspection Report, excluding the conclusions and Executive Summary portion will be sent when the report is available.

Sincerely yours,

  
Kevin M. Pierard, Chief

OH/MN Technical Enforcement Section

Attachment

cc: Larry Eastep, IEPA, Springfield  
Cliff Gould, IEPA, Maywood

## ATTACHMENT 1

The definitions of solid waste management unit (SWMU) and area of concern (AOC) are as follows:

A SWMU is defined as any discernable unit where solid wastes have been placed at any time from which hazardous constituents might migrate, regardless of whether the unit was intended for the management of a solid or hazardous waste.

The SWMU definition includes the following:

- RCRA regulated units, such as container storage areas, tanks, surface impoundments, waste piles, land treatment units, landfills, incinerators, and underground injection wells
- Closed and abandoned units
- Recycling units, wastewater treatment units, and other units that U.S. Environmental Protection Agency has generally exempted from standards applicable to hazardous waste management units
- Areas contaminated by routine and systematic releases of wastes or hazardous constituents, such as wood preservative treatment dripping areas, loading or unloading areas, or solvent washing areas

An AOC is defined as any area where a release to the environment of hazardous wastes or constituents has occurred or is suspected to have occurred on a nonroutine or nonsystematic basis. This includes any area where such a release in the future is judged to be a strong possibility.